Scientists study old bones and learn new things about Native Americans

By **Los Angeles Times, adapted by Newsela staff**

May. 19, 2014 4:00 AM

A diver carefully observes "Naia," a 12,000- to 13,000-year-old teenage girl whose remains were found in the Hoyo Negro cave on Mexico's Yucatn Peninsula.

In myth and legend, nymphs are nature spirits. They take the form of beautiful maidens who live in water or woods. So when divers discovered the underwater remains of a teenage girl, they named her Naia, for "water nymph."

Naia's skeleton was hidden in a dark, underwater cave in Mexico's Yucatan Peninsula. This wasn't a case for the police, though. She'd been there for more than 12,000 years.

Divers quickly spotted her skull as they swept the chamber with flashlights.

"It was a small cranium laying upside-down," recalled diver Alberto Nava. The skull had "a perfect set of teeth and dark eye sockets looking back at us."

On Thursday, scientists published the results of their study of Naia's bones. They called them the oldest human bones ever discovered in the Americas.

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The scientists say that the buck-toothed 15- or 16-year-old girl did not look like today's Native Americans: Her cheeks were narrow and her forehead very high. However, her DNA reveals she is related to around 1 in 10 living American Indians. DNA is like a set of instructions that determines how any living thing forms.

That finding helps prove something else: that Native Americans are all linked genetically to one population of early humans. Many thousands of years ago, those common ancestors inhabited a land now submerged beneath the Bering Sea.

The scientists say Naia was probably very slight and stood just 4 feet, 10 inches tall. Her eyes were wide-set and low, and her nose was broad.

The scientists believe the girl entered a dark, underground cave in search of water. As she felt her way through the darkness, she suddenly fell into a deep underground chamber. More than 100 feet deep, that chamber is now called Hoyo Negro, or black hole.

Nais's hip bone was shattered from the fall. Unable to escape, she died in the hole.

Many years later, the ice age came to an end. Glaciers began to melt, which caused sea levels to rise. Slowly, the Hoyo Negro filled with water, until it was completely submerged. Naia lay undiscovered in her underwater chamber until divers arrived in 2007.

Naia's discovery may help settle a disagreement among scientists.

Most scientists believe that the first people to arrive in the Americas came from Asia. Some, however, have argued that they also came from Europe.

There's a simple reason for the uncertainty: Some of the earliest humans yet found in the Americas look very little like present-day Native Americans. That difference convinced some scientists that early Americans had roots in Europe as well as Asia.

A Land Surrounded By Ice

Naia is one of those early humans who don't look like modern Native Americans. Yet, it turns out she is related to them anyhow.

That lends support to one explanation: The first people to arrive in the Americas were descended from Asians, but didn't come directly from Asia. For thousands of years, their ancestors had lived in a land between Siberia and Alaska.

Known as Beringia, this land was surrounded by vast sheets of ice. That kept those who lived there cut off from other peoples. They developed on their own, and even started to look different from other Asians.

When the ice age ended, the ice sheets began to melt. Sea levels rose and Beringia began to disappear. The people of Beringia left and spread swiftly through North and South America.

Over many, many generations, they began to change in appearance. Gradually, they began to look like modern Native Americans.

All Native Americans have the same roots, study leader James Chatters said. They are "descended from the same homeland."

Scientist Michael Waters said he was excited to see what further study of the girl's skull would show. Scientists are trying to figure out what she looked like when alive.

"That will be pretty interesting," Waters said.

"These early skeletons are so rare," he said. "We have to really get as much information as we can from them."